

Instructions for proposers using lunar Gateway capabilities

1) For proposers making use of the communications and data relay capabilities of the lunar Gateway:

Proposers should assume a link to the Gateway similar to that described for communication to the lunar surface, using Ka band as specified in Section 3.2.2.6 of the Communication System Interoperability document Comm_020918_R2.

2) For proposers of attached payloads on modules of the lunar Gateway:

Gateway is expected to host external payloads, providing power, data links and communications. For small external payloads (WMI/ORI interface), the following is planned:

| | |
|--------------------|--|
| Mass (on-orbit) | Up to 250 kg (To Be Confirmed) |
| Power | Max 500 W (TBC) |
| Data | TTE, 1 Gbps effective |
| Thermal | Payload-provided, passively cooled |
| Communications | Up to 100 Mbps downlink, near continuous communications available |
| Operational Volume | 1 m x 1 m x 1 m (TBC) |

The Gateway is expected to operate in a Near Rectilinear Halo Orbit (NRHO) in a fixed tail-to-Sun orientation, so that the Gateway attitude rotates once a month with respect to the Earth-Moon frame. Proposers should consult the document “Gateway PL IF 2019-04-19” and the International External Robotic Interoperability Standards document Robotics-020918_R1.

Further information will be posted in the Program Library when it is available.

This document, and other Gateway and rideshare documents in the Program Library, may be updated periodically, but no later than 30 days before the proposal due date. It is each proposer’s responsibility to check for updates.

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Program Library documents:

[Comm_020918_R2](#)

[Gateway PL IF 2019-04-19](#)

[Robotics-020918_R1](#)